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WORDS FOR TOBACCO IN AMERICAN INDIAN LANGUAGES¹

By ROLAND B. DIXON

OF all the features of aboriginal American culture, the use of tobacco has long been regarded as one of the most characteristic. The idea of questioning its native character and antiquity could, in virtue of the mass of evidence indicating its use in very early times, hardly occur to anyone at all familiar with the results of American archaeology during the last generation. Professor Wiener, however, in a recent volume² has, in characteristically iconoclastic fashion, challenged this general conviction, and seeks to show, primarily on linguistic grounds, that not only are the words for tobacco over a large portion of the New World of West African Negro origin and ultimately derived from Arabic, but that the tobacco plant itself and the custom of smoking were unknown here until they were introduced, primarily by the Negro slaves brought over by the Portuguese and Spaniards, in the early part of the sixteenth century. Any question of the use of tobacco in America in pre-Columbian times is of course answered sufficiently and conclusively by the archaeological data and no amount of evidence that certain *words* for tobacco were of African origin could avail to prove the foreign introduction of the *plant*, in the face of the occurrence let us say of pipes or cigarettes in basket-maker or cliff-dweller sites, or of pipes in strata of typical Toltec culture in the Valley of Mexico. While therefore,

¹ In spelling the many native words I have usually transliterated antiquated forms, where necessary, according to more modern usage. In a few cases, however, where the original forms are not open to misinterpretation, I have left the older spelling, but enclosed the forms in parentheses. I have not burdened the pages with the voluminous footnotes necessary to refer in every case to the sources from which the various words have been taken, since these are for the most part well known to linguistic students. In a few cases where it seemed desirable, full references have been given.

² *Africa and the Discovery of America*, vol. I. Philadelphia, 1920.

Professor Wiener's theory of the African origin of the plant itself and the custom of smoking, is manifestly quite indefensible, it is perhaps worth while to examine critically the evidence which he presents for the foreign origin of certain tobacco words. It will, I believe, be shown, that not only is there little or no foundation for the belief that American Indian words for tobacco are derived from Negro or European sources, but that the author of the theory could hardly have arrived at his conclusions, if his investigation of the whole question had been less superficial and more sound in method. Incidentally, this survey of the various words in use throughout the New World for a single object, brings out a number of interesting details as to possible culture contacts between rather widely separated tribes, and raises a number of rather puzzling questions.

Discussion of the data may be prefaced by a few words as to general principles. Native names for native products may in general be expected to be confined to languages of a particular linguistic stock, and each stock may thus be supposed to have its individual stem or stems which will not appear in unrelated languages except in rare cases and then only where influence or contact exists or has existed. An introduced name for a foreign product on the other hand may be expected to show a distribution which is quite regardless of linguistic frontiers. Moreover, words of native origin in most cases may be expected on analysis, to show some relationship to stems of general meaning in the language; foreign words on the other hand, would either show no related stems, or only such as would naturally be derived from the exotic stem, and not of fundamental or general character. Similarities between words in unrelated languages naturally suggest borrowing, but this can not be regarded as proven, until analysis of the words has shown that they are not, after all, derived from quite different stems, and that the resemblance is thus only fortuitous.

Knowledge, however, of perhaps the majority of American Indian languages is still far too imperfect to enable us to do much in the way of analysis, and no one student can hope to be competent in this respect for all even of the languages for which we possess

reasonably detailed knowledge. In what follows, therefore, I have merely tried to gather together and present the data, calling attention to such superficial, resemblances as seemed possibly significant, and only here and there attempting anything in the way of analysis.

Beginning the consideration of tobacco words with those of North America, it may be noted that the various linguistic stocks fall rather easily into two groups, (1) those which, with a wide area of distribution, employ two or more different stems, and (2) those, in general of more limited extent, which have but a single stem. Taking this latter group first, it appears that the stocks which it comprises fall naturally into a number of geographic subdivisions.

The Southeastern group includes the Uchean and Timuquanan stocks, the word for tobacco in the former being *i*, in the latter *hini*. There is no certainty of any resemblance between these two forms, and the only suggestion of similarity with neighboring stocks is in the case of the Creek, *hitci*.

The Gulf group presents somewhat paradoxical results, since the Attacapan, Chitimachan, and Tunican stocks which have recently been united by Swanton show three quite different forms (Attacapa, *tsig*; Chitimacha, *net*; Tunica, *era*); whereas the Coahuiltecan, *a'h*, Karankawan, *ak-anum*, and Tonkawan, *baqa*, *ne-bax-kan*, seem to show considerable resemblance. On the other hand a second form, *naots*, given for Tonkawan, suggests possible relations with Chitimachan. With neighboring stocks there is a suggestion of relationship with the Caddoan, where the Wichita has *tahah*, and the Caddo, *yahah*.

The Southwestern group with Zuñi, *ana*; Keresan, *hami*; and Tanoan *ca*, *Le*, *tiōye* shows wide variability. The only form exhibiting similarities with other stocks is the Zuñi, which may be compared with Navajo-Apache, *nat'o*, and possibly (?) with the Siouan stem, consonant + *ani*, or the Karankawan *ak-anum*.

The Pacific Coast group is more widely scattered, but it too shows several examples of similarities. Beginning in the south we have Yukian, *waimil*; Yakonan, *tcuursen*; Kalapuyan, *kainoL*; Chinook, *KainoL*; Wakashan, *Lauk*; Tsimshian, *wundd*; Haida, *gul*, *kwil*;

Tlingit, *gan(tc)*. Similarities are in all cases, as will be noted, between adjacent or supposedly related stocks. With neighboring stocks the only similarity noted is that of the Wakashan with the Bella Coola and Salishan tribes of Vancouver island. As the interior Salishan tribes all have a different term, it is obvious that the resemblance is due to the coastal tribes borrowing the Wakashan form.

The Plateau group, finally, like the one just considered, shows but few cases of possible relationship between its members. We have: Klamath, *katchkal*; Shahaptian, *toh*, *tuwah*; Waiilatpuan, *hunc̥t*, *fānp̥*; Kutenay, *yaket*. The chief similarities with other stocks are Shahaptian *tuwah* with Hokan forms such as Shasta, *owa*; Yuma, *ova*; Pomo, *kuwa*. A curious instance of probably accidental resemblance is that of the Waiilatpuan (Cayuse) *hunc̥t*, with the Tlingit, *gan(tc)*.

The results of this comparison of the words used for tobacco by the smaller linguistic stocks, show that in general each stock has its own peculiar form, although in a few cases borrowing may have occurred between adjacent tribes. For none of the words in these stocks has Professor Wiener asserted an African source, and none show any resemblance to his three primary Negro forms, except possibly the Tunica.

Turning now to the larger and more widely distributed stocks, we may begin with the Algonkian. The languages of which we have adequate information, have been grouped in four divisions, the Blackfoot, Cheyenne, Arapaho, and Eastern-Central, of which the last comprises the great majority. The words for tobacco in all the languages of this last division except the Eastern section, are derived from a common stem *sēma* or *asāma*: thus we have Cree-Montagnais, *tcistēmā*; Menomini, *nānimau*; Sauk, *seiman*, *sāmon*; Fox, *Asāmarw^a*; Kickapoo, *nessāmon*; Shawnee, *θema*; Ojibwa, *assāma*; Potawatomi, *sēma*; Ottawa, *sema*; Algonquin, *semah*. The phonetic variations are in accord with known sound modifications (Cree-Montagnais *st*, Menomini *n*, Shawnee *θ* = general Central Algonkian *s*). It is difficult to see any grounds whatever for supposing this Central Algonkian stem to have

been derived from the Negro *taba*, *tama*, *tawa*, for as initial *t* is common in Algonkian languages, there is no reason to expect a modification of *tama* to *sēma*. Since, moreover, the Arawak, word for tobacco (originally of "Negro origin") which, it is claimed by Professor Wiener, was brought overland from the Gulf to the Iroquoian tribes of Ontario and the St. Lawrence was not *tama* but *yuli*, *yari* giving rise to *yen*;¹ and since on the basis of his theory, the Central Algonkian tribes must have obtained both plant and name from this same source, there seems to be no possible way in which his *tama* stem of African origin could have reached them. Until the author of the theory explains how this could have occurred there can be no reason for giving the suggestion of African origin any serious consideration.

The Eastern sub-division of the Central Algonkian languages, derive their words for tobacco from a different stem, viz., Micmac, *tamāwā*; Abnaki, *udaman*; Maliseet, *tumawé*; Passamaquoddy, *dumawai*; Natick, *wuttamaug*; Narragansett, *ottomaok*. From this same stem, *tama*, *AtAmā*, the words for "pipe," and "to smoke" are also formed in these languages, and the words for "to smoke" in nearly all the rest of the Central Algonkian group. Professor Wiener might justly claim here, a virtual identity in sound between the Eastern Algonkian stem and his Negro *tama*—but, he has by his own statements denied himself the right to claim any relationship, since he states² that only the Brazilian *petun* forms were introduced by the French up the St. Lawrence, and explicitly declares that, in the region between this river and Florida, the words for tobacco "proceeded northwards from Virginia, where the oldest form of the word is an abbreviated Span. *tabaco* or Fr. *tabac*." This form *apooke* presents obviously no relation to the Micmac and other Eastern Algonkian words, so that again no evidence is presented for the foreign origin of the American stem.

The western languages of the Algonkian stock, differing as they do widely in vocabulary from those of the Central type, have, as might be expected, somewhat variant forms in their words for

¹ Wiener; *op. cit.*, p. 185.

² *Ibid.*, p. 191.

tobacco. The Blackfoot, *pistakan*, may conceivably be related to the Cree-Montagnais, *tcistemau*, and so ultimately derived from the general stem *sema*, *asäma*. The Arapaho, *sisawa*, and Gros Ventres, *seḡawa*, are also, possibly related as is (?) the Cheyenne, *tsinimo*. That these western languages have, however, points of close contact with eastern forms is shown by the resemblance between the Blackfoot stem *-tsissi*, to smoke, and the Brother-town, *ni-tsisimu*, tobacco. The languages of the Lenapé and southern Atlantic coast tribes offer further interesting variants. The Lenapé themselves seem to employ a stem *-cate*, *-tcate* (*kshatey*, *koshate*, *gutschartai*, *shaate*) which suggests the Cheyenne-Gros Ventres stem for pipe, *-tca*, *-tsa*, or might on the other hand be compared with the neighboring Tuscarora and Cherokee, *tcahu*. On the other hand the word used for tobacco by the Virginia tribes and their relatives (*uppowoc*, *uhpook*, *apooke*, *hoohpau*) shows a stem from which these same tribes also derive their words for pipe (*uhpooacan*, *pawpekon*) and which is the basis furthermore for the words for pipe, not only in Lenapé (*hopoagan*) and Natick (*hopuonck*), but also in all the Central Algonkian languages, viz., Cree, *ospwagan*; Montagnais, *cpuagan*; Menomini, *ukpokan*; Sauk and Fox, *pwakan*; Kickapoo, *poakan*; Shawnee, *p'quaga*; Miami, *poakanoh*; Illinois, *poagan*; Ojibwa, *opwagan*; Algonquin, *opwagan*. That all of these are derived from *apooke* and that this is a mere apocopation of *tobacco* (in which Professor Wiener enigmatically says that the *t-* appears as the "pronominal suffix"!) is a theory which without further evidence is not worthy of consideration. The other suggestion,¹ that the Cree-Montagnais stem *pitu*, to smoke, is derived from the French, *petun* in turn from the Brazilian *petun*, while superficially more credible, is certainly open to some question. The general Central Algonkian stem for "to smoke" is, as has been pointed out, *AtAma*, *tama*, *AtAmä*; the Ojibwa and Algonquin, however, use a stem *sagas-*, while the Cree-Montagnais as stated above, have *pit* or *pitu*. The fact that the supposed loan word is found only in these two closely related languages which extend over a very large area, and is

¹ *Op. cit.*, p. 144.

unknown to the other Algonkian tribes of Canada who had at least an equal opportunity of borrowing the word, makes the suggested origin not a little doubtful.

The languages of the Muskogean stock make use of two different stems for their words for tobacco. All except the Muskogee have a stem *hak* or *ak*, viz., Hitchiti, *ak-tcomi*; Natchez, *hag(au)*; Alibamu, *hak-soma*; Choctaw, *hak-tcuma* from which the Muskogee form *hitci* seems to be quite different. With the words for tobacco in use by neighboring stocks, this general stem, *hak*, *ak*, seems to show no resemblance, although its similarity to the more remote Coahuiltecan, *a'h*; Karankawan, *ak-anum*, and Tonkawan, *ne-bax-kan* has already been pointed out. Professor Wiener in his search for evidences of borrowing of Negro words, found comfort in the Choctaw *hak-tcuma*, whose latter portion he identified as the stem for tobacco, and thought to be derived from the Mande *tama*, while the *hak-* he assumed to be the article.¹ In so doing he has "emptied out the baby with the bath," since what he thought to be the article is in reality the stem! That *hak-* was not the article a moment's reference to any Choctaw grammar would have shown, since the article follows and does not precede the noun.

Words for tobacco in the languages of the Siouan stock seem, in the majority of cases, to be derived from a common stem, of which the initial consonant is rather widely variable. Thus, Dakota, *tcañdi*; Assiniboin, *tcanti*; Kansas, *nahni*; Omaha, *nini*; Osage, *nanāhu*, *pahni*; Ponca, *nini*; Iowa, *nanye*; Oto, *rane*; Winnebago, *tanina*; Ofo, *itcani*; Biloxi, *yani*; Tutelo, *yehni*. The Kwapa, *tadmi* and Mandan, *manacé* (Cf. Mandan *manainiduc*, tree; *manape*, leaves; Dakota, *tcañde*, *tcañwapa*) may also be derived from the same stem. The Hidatsa-Crow languages make use of a different stem *ope*, which, curiously, seems to be that used by the Catawba, whose word for tobacco is *umpa*. This stem seems also to be related to the Dakota *uñpa*, to smoke. Whether or not there is any relation between this Siouan stem and the general Algonkian stem for pipe, *upo* it is hard to say; the resemblance of the Catawba *umpa* and the Virginia Algonkian *uhpook*, *apooke*, etc.,

¹ *Op. cit.*, p. 140.

is rather striking. Among the terms which Professor Wiener claims are derived from African originals, through Carib and Arawak, is the Biloxi *yani*. As this is so clearly a normal variation of the general Siouan stem, there is not the slightest reason to seek for it a foreign origin.

The Caddoan languages appear to have two different stems. The more northerly tribes have, Arikara, *nakuckanu*; Pawnee, *nawiskaru*; while the more southerly have forms which seem quite unrelated, viz. Caddo, *yahah*; Wichita, *tahah* or *weko*. The resemblance of these latter forms to the neighboring Coahuiltecan, Karankawan, and Tonkawan has already been noted.

In the languages of the Salishan stock, all the interior dialects make use of a single stem, viz., Lillooet, *smanih*; Thomson River, *cemen'eq*; Shuswap, *smanq*; Okinagan, *sma'n'uq*; Flathead, *sman'hu*; Coeur d'Alene, *semelkh*; Columbia, *smanhu*; which is also the basis of the words in two of the coastal dialects, i.e., the Songish and Niskwalli, which have Clallam, *smanac*; Lummi, *smanuc*; Songish, *smanic*; Niskwalli, *smanac*. This wide-spread stem shows no apparent resemblance to forms in use in any adjacent stocks, but may perhaps (?) be compared with the Central Algonkian *sema*, *asäma*. The Blackfoot, however, who are actually in contact with the Eastern Salishan tribes did not use this stem, so that unless their form *pistakan* is a relatively recent term, it is difficult to see how the borrowing could have taken place. Although the great mass of the interior Salishan tribes have thus a common stem for tobacco, the coastal tribes, with the exceptions above noted, use other stems. The more northern tribes have adopted the Wakashan stem, Bella Coola, *La'uk*; Comox, *a'wak*; Cowichan, *ewauk*; while the Squamish and Nanaimo dialects appear to have an independent form, *spo'Len*. The two southern coast groups, the Chehalis and Tillamook also have words which, with one possible exception, seem to have no similarities with others either within or without the stock, viz., Chehalis, *stxlusoqua*, *kwlemihin*; Cowlitz, *kwalemuxlin*; Tillamook, *suxoötxlil*, *tsotxltxl*. It is possible that the Cowlitz form is related to the Nez Percé, *kelamut* pipe, itself apparently from "calumet" which is of European origin.

The words for tobacco in the Athapaskan stock show a number of interesting features.¹ Beginning with the northern tribes we find one stem in use by the Kutchin tribes, viz., Loucheux, *tsetted*; Upper Yukon, *se'ei-i-ti-it*; as well as the Dog-rib, *tsedetti*; the Hares, *tse-etturi*; the Montagnais, *tseenttu*; the Slave, *set'u*, *tcelttohi*; and Chipewyan, *ts'elt'ui*. In these the *-l'u* is probably the stem for "to suck." A second stem is found among the majority of the British Columbia tribes, viz., Sekané, *edeke*; Nahané, *dekkei*, *tseakh*; Carrier, *teka*, *tsahara*; Beaver, *atdegai*. Individual tribes in this northern group present still further variants: thus we have Kaiyukhotana, *tahkuna*; Tsetsaut (Ahtena), *k'a*; Sarsi, *'akacinna*; Chilcotin, *tsulu*. Of these the Chilcotin seems to be related to the Chipewyan-Slave type, while the Sarsi may be compared with the Sekané-Carrier type so far at least as its first portion is concerned; the *-cinna* probably means "stem of a plant." This is curiously similar to the *tsinimo* of the Cheyenne. Possibly the *'aka-* of the Sarsi and the *teka* of the Carrier, Sekané, etc., may be comparable with the Tlingit *gan*.

The Pacific Coast group of Athapaskan languages, show rather more uniformity among themselves. Tlatskanai, the northernmost, has *tötcané* which appears to be unique, but the Umpqua *setxlio* and the Coquille, Tolowa *setyo* and Lassik *setyo* are practically identical and are analyzable into *set* + *yo*, of which the latter is the stem "to blow." The first portion *set-*, *set-* seems likely to be the same as the *ts'el-*, or *tset-* of the Chippewyan group, and if this suggestion is confirmed, we should have one single stem in use among tribes of this stock from the Mackenzie delta to California. Whether the Nongatl and Sinkyone *sin-yo* is also traceable to the same stem, is not clear. The Hupa and Kato forms, *mindeiltcwe* and *lit-tanoñ* show no relationship at all to other forms and are probably the result of circumlocutions devised on account of the death of some person whose name involved the stem formerly used for tobacco.

The words for tobacco among the Southern Athapascans,

¹ For much information in regard to Athapaskan forms I am indebted to the kindness of Dr. P. E. Goddard.

Navaho, and Apache, *nat'o*; Jicarilla, *nat'odi*, are practically identical, and like the Chipewyan group in the north, are compounds of the verbal stem *-t'o* to suck. It is at least interesting, and perhaps significant, that the Zuni word for tobacco is *ana*.

The apparent relationship of the Pacific Coast Athapaskan *set-*, *set-* to the Chipewyan-Kutchin *ts'el-*, *tset-* would seem to make it probable that the knowledge of tobacco had already been acquired before their separation, and further, would suggest that the Pacific Coast group were associated more with the Plains-Mackenzie than with the Rocky Mountain group of Northern Athapascans. Moreover, the fact that the Kutchin tribes of the upper Yukon use the same stem as the Chipewyan, Dog-rib, etc., would indicate that the use of tobacco spread into the upper Yukon region from the eastward. Lastly, the fact that the Navaho and Apache have a different stem than any of the other branches of the stock (*i.e.*, the use of *na-*) might be taken as evidence that the separation of this southern group took place before the use of tobacco was known.

In the Iroquoian stock, the Five Nations and probably the Hurons made use of a common stem (*o*)*yengw*, (*o*)*yenkw*, viz., Mohawk, *oiengua*; Onondaga, *oienkwa*; Cayuga, *oyeangwa*; Seneca, *oyanqua*; Huron¹, *oyngoua*. The Huron forms given by Sagard (*testena*, *tistenda*, *ayentaque*) are obviously from other stems, and will be considered later. Whether the form (*quiecta*) given by Cartier as in use at Hochelaga is from the same stem is uncertain. Transliterated into phonetic spelling, Cartier's word would probably be something like *kiyekta* (Cf. Iroquois, *ki-enkwa-thas*, *ki-yenkwa-t'as*, to put tobacco in one's pipe) in which the *-yek-* may be a dialectic form of *yenkw*. The southern Iroquoian tribes derived their words for tobacco from a wholly different stem, viz., Tuscarora, *tcarho*, *tcehra*; Cherokee, *tcarhu*, *tsalu*, which may perhaps be compared with the Onondaga, *watcrot*a (*wachrot*a), to smoke.

Professor Wiener in discussing the Iroquoian tobacco words seems to have gone astray in consequence of insufficient investigation of the facts. He states in the first place that Sagard's Huron forms for "tobacco," *ayentaque*, *testena*, *tistenda*, and *ayettaya*

¹ As given by Lahontan, Thwaites edit., II, p. 748.

"I smoke," are "all from the root *yen*"¹ from which he also derives the Onondaga and Mohawk forms (*ojenqua*, *oienkwa*, etc.). A little further investigation, however, would have shown that the stem for tobacco is probably not *yen* since this enters into the formation of a number of words of quite unrelated meaning, viz., Mohawk, *gaienrha*, (*oienguara*) smoke; *oiente*, (*gaienta*) word; *gaienseron* to decorticate; *gaienton* to strike; *gaienθon* to own a field; *gaienteron* to know, etc., etc. It seems probable that the stem for tobacco must end with a guttural. Turning now to the Huron words as given by Sagard, it is clear that the problem cannot be settled in such an off-hand manner as that employed by Professor Wiener. It is fairly obvious that *testena*, *tistenda* are not derived from either *yen* or *yenk*^w. The form *ayentaque* like the Iroquois terms cannot well be from a simple stem *yen*, but rather from *yent*, *yenta*. This it may be observed, is the Iroquois stem for wood (*oiente*, *gaienta*) to which the Huron form, although rather variant (*ondata*, in composition *-inda-ta*), seems related. The Huron word for "I smoke" is, moreover, probably not derived from this stem at all. Sagard gives a number of forms, viz., *ayettaya*, *agataya* "I smoke"; *etaya* "give me something to smoke"; *ataya* N. "N. smokes"; *sateya* "smoke!" Obviously, these are not derived from any stem *yen* or *yent*. Chaumonot, whose knowledge of the Huron language was far better than Sagard's, gives *atayen* "to smoke"; *etayak* "I smoke"; *eyetaya* "I shall smoke"; *te yetayan'de* "I am not smoking." The stem involved in all of these forms is pretty clearly something like (*a*)*taya* or (*e*)*taya* which may not improbably be connected with (*a*)*teyen* to burn. From what has been said, it is clear that the theory of the derivation of the Iroquoian and Huron words for tobacco from a stem *yen* derived from the Negro through the Arawak *iouli*, *yari*, *yeury*, improbable as it is on other grounds, is also indefensible on the linguistic side.

The two recently advocated Californian stocks, the Penutian and Hokan, each of which combines a number of what had previously been regarded as separate stocks, show little uniformity in their words for tobacco. The Penutian has more separate stems than

¹ Wiener, *op. cit.*, p. 145.

the number of former stocks of which it is composed, viz., Maidu, *pan*; Wintun, *lol*, *bomit*; Miwok, *kaiyau*, *kasu*, *kahu*; Costanoan, *mat(er)*, *oya*, *sawan-s*; Yokuts, *sokon*, *tcani*, *baum*. Within the stock it seems reasonable to connect the Maidu *pan* with Yokuts *baum* especially since the Sierra dialects of the Miwok which lie between the two, have *paumma* for pipe. With this may also be placed the Southern Wintun *bomit*. The same stem, apparently, is found further afield, namely among the Shoshonean tribes lying to the eastward, where the Shoshone-Comanche and Mono-Paviotso have *pamo*, *pamu*. If the common origin of these forms is admitted, the question naturally arises as to whether the Shoshonean or Penutian tribes were originators of the stem, but this can hardly be answered with certainty as yet. Other comparisons which might be made are Costanoan, *oya*, with Yukian, *woyol*; Yokuts, *sokon*, with Chumashan, *co(x)* and Pomo, *sako*, *saxa*. The Miwok, *kasu*, *kahu* and Esselen, *k'ua*, is more doubtful, and the close similarity of Yokuts *tcani* and Dakota *tcāñdi* is probably wholly fortuitous.

In the case of the Hokan stock there is more probability that the majority of the words for tobacco are formed from a common stem. Thus we have Karok, *-hera*; Chimariko, *uwuh*; Shasta, *owa*; Achomawi, *op'*; Atsugewi, *ohpi*; Yana, *mohu*; Pomo (N., C., E. and N. E.) *saxa*, *saka*, *sako*; (S., S.W., S. E.) *kawa*, *tom-kowa*; Chumashan, *co(x)*; Salinan, *talam*; Esselen, *k'aa*; Yuman, *uba*, *ova*, *auva*, *auba*, *omp*; Seri, *api*; Washo, *bankuc*. The Washo form suggests a connection with the Penutian-Shoshonean *baum*, *pamo* which, since the Washo are entirely surrounded by these tribes, would not be improbable.

In connection with the Californian words for tobacco, mention must be made of the term given by Fletcher as obtained on Drake's voyage in 1579, to which much importance is attached by Professor Wiener.¹ Fletcher states that the Indians brought as a gift, bags of an herb which they called *tabah* or *tobah*. This is declared by Professor Wiener to be evidence that tobacco and its name (derived in this instance from Span. *tabacco*) had been introduced by Spanish or Portuguese visitors prior to Drake's visit. The consensus

¹ *Op. cit.*, p. 141.

of opinion places the location of his stay at or in the vicinity of Drake's Bay, which lies squarely within Miwok (Penutian) territory. The dialect spoken in this vicinity has for tobacco the word *kaiyau* in which it would require a very lively imagination to see an origin from the Spanish *tabacco*. It may be noted, however, that the coastal Pomo (Hokan) dialect adjoining the Miwok to the north, has *kawa* for tobacco which might have been heard by Fletcher as *tabah*. If this is the source of his word, then either the place of Drake's stay must have been farther north than has been thought (and on account of the character of the coast this is in the highest degree unlikely) or the southern limit of Pomo speech must have moved northward considerably since the end of the sixteenth century, for which supposition there is little evidence. It is of course also possible, that the plant in question was not tobacco, although in view of Drake's statement that the Indians brought "tabacco" this is not likely. That tobacco and its name could have been introduced prior to Drake's visit is extremely improbable. Cabrillo was the first explorer of the Californian coast north of San Francisco. On his voyage in 1542 he neither landed nor had any contact with the Indians in this region, and no other explorer or visitor is known to have been in the region between this date and Drake's visit, so that introduction of the plant and its name would seem to be quite doubtful. Moreover, the fact that the two species of tobacco (*i.e.*, *Nicotiana Bigelovii* and *N. attenuata*) used by the Californian Indians were local and quite different from those in use in Mexico and the eastern United States would in itself be sufficient evidence for any botanist of the impossibility of Professor Wiener's claim.

With the Shoshonean languages, we come to the northernmost member of the now pretty generally recognized Uto-Aztecan stock which includes, besides the Shoshonean, the Piman and Nahuan languages. The Shoshonean branch is far from employing a single stem for its words for tobacco. The Shoshone, Bannock, Mono-Paviotso, and Comanche all have a stem *pamo*, or *pamu*, whose similarity with Penutian forms has already been pointed out. The Ute-Chemehuevi words are derived from a stem *kwap*, *kwap* which appears to have no cognates anywhere. With the Southern

Californian dialects we come to what is apparently the general Uto-Aztecan stem *piva*, only the Kern River tribes differing in having a form *cokont* derived from the Yokuts *sokon*. The general Uto-Aztecan stem is found among the Hopi and throughout the Piman and northern Nahuatl languages as far as Durango, viz., Hopi, *piva*; Pima, *böv*; Papago, Opata, *viva-t*; Tarahumare, *wipa*-; Yaqui, *vivam*; Tepehuane, *vivai*, *virai*. In the Cora and Huichol further south this becomes *ya*.¹ In the Nahuatl itself the word for tobacco seems clearly to be *ye-tl*, the stem of which may well be related to the Cora-Huichol *ya*.

The evidence for this Nahuatl form, however, requires a brief discussion, since Professor Wiener has declared² that the word "had no special meaning" and was probably derived from the Negro through the Arawak *yuli*. As he states, Olmos seems to be the first to use the term *yel* which he translates "sahumerio," i.e., perfume, incense. In Molina's dictionary the word itself does not appear except in the form *picietl* defined as "an herb like henbane, which is medicinal." Professor Wiener goes on to point out that Hernandez³ does not use the word *yel* in the edition of 1615, but in that of 1651⁴ gives it as the equivalent of *picietl*, saying further that it is used in the making of cigarettes. So far Professor Wiener is on safe ground, but makes an unpardonable error when he states that *yel* is a "back formation from *picietl*" which is itself "an un-Mexican formation, for *pic-* does not occur in any other word whatsoever."⁵ As a matter of fact there are four other words which immediately follow *picietl* in Molina's dictionary which contain the stem *pic-*, viz., *piciliui* to become small (not "to crush, to triturate" as Professor Wiener gives it); *piciloa* to waste or diminish; *picillic* small, as of objects like pebbles or pearls; *picqui* a compact, solid thing. Other examples of the use of the

¹ Sapir: *American Anthropologist* (N.S.), XVII, p. 110.

² *Op. cit.*, pp. 150, 155.

³ F. Hernandez: *Cuatro Libros de la naturaliza y virtudes mēdicinales de las plantas y animales de la Nueva España*. Morelia, 1888, p. 136.

⁴ *Nova plantarum, animalium et mineralium mēxicanorum historia*. Romae, 1651, pp. 173 sq.

⁵ Wiener: *op. cit.*, p. 150.

same stem are the reduplicated forms *pipica* to drop a liquid drop by drop; *pipiciltic* a small seed or similar object and also *piciciltli* a species of small bird. In saying, therefore, that *pic-* "does not occur in any other word whatsoever" except *piciell* Professor Wiener is guilty of an extremely careless misstatement and misrepresentation of the facts. It is fairly obvious that *pic-* is a stem connoting the general idea of "smallness," and that therefore we are led to suppose that *pic-iell* (*pic-yell*) probably means "small or dwarf *yell*." If we turn to Hernandez this supposition is immediately confirmed, for on the same page to which Professor Wiener refers, it is expressly stated that there are two varieties of the plant, one called *piciell*, the other *quauhiyell* of which the former or ordinary variety is a small plant "two palms in height," whereas the latter (whose name means tree-*yell*) is much larger, growing as tall as a lemon tree. This demonstrates very clearly the existence of *yell* as an independent word, and that it can be nothing else than tobacco is shown by Hernandez's explicit statement that the small variety is the same plant which is called *tauacco* in Santo Domingo, and that it is used with other aromatic substances in the making of cigarettes. Further confirmation of the existence of a word *yell* may also be seen in the modern Mexican term *yellalcingo* (for *yella-tzin-co*) meaning "tobacco plantation."¹

For the little known and extinct languages of northeastern Mexico, no data are available, but from the four stocks in the great enclave in Nahuatl territory, material is at hand for three, viz., Otomi, *yiy*; Totonac (Tepehua) *llui*, *huxcuti*; Mayan (Huasteca) *mai*. Of these the only one which may be compared with forms in neighboring stocks is the Otomi, which is not very remote from the Nahuatl *ye-* and Cora-Huichol *ya*. From the Zapotecan stock we have forms from the Zapotec, *gessa* and Amuzgo, (*ts*)*o-kohnu*; from the Zoque we have *otsi*, *tsaiwi* and Mixe, *huuk*, *hvik* none of which appear to show notable resemblance to terms in other languages. The Tequiztlatecan, which has recently been suggested as a remote outlier of the Hokan stock, has *ame*.

The Mayan stock, all of whose members except the Huasteca

¹ Robelo: *Diccionario de Aztequismos*, Cuernavaca, 1904, p. 415.

occupy a solid block from the Caribbean to the Pacific separating the languages of Mexico from those of Central America, has three different terms for tobacco. The Tzendal and Chicomulteca in Chiapas and the Kekchi and Pokomam in central and southern Guatemala use the form *mai* which is that in use, as already pointed out, by the Huasteca in Vera Cruz. The Chuje, Jacalteca, Mam, Aguacateca, Zutuhil, and Uspanteca occupying the area in Guatemala between the two *mai*-using groups, employ the stem *sic*. The Chontal, Maya, Chol, and Chorti who occupy all the northern portion of the stock area on the other hand have a stem *kutz*. On the basis of the tobacco words, therefore, the outlying Huasteca seem connected with the Chiapas and Guatemalan tribes rather than with those of Yucatan.

In the region of great linguistic diversity lying between Guatemala and Panama, data on words for tobacco are available for all the important languages except those of northern Honduras (Jicaquean and Payan) and the southern Nahua dialects. The terms found are as follows: Lencan, *wa, yahua*; Subtiaban, *rande*; Matagalpan, *wili, wilin*; Chiapanecan (Dirian) *nemurema*. Of these the Lencan and Matagalpan may well be compared with the Cunan *wala*. The Ulvan *aka* and Mosquito *twaka* are obviously connected, and the latter at once suggests an origin from *tobacco*, yet Brinton¹ gives a quite different word for the Mosquito, viz., *u* which would look rather toward the *wa, wala, wili* forms just noted. It is to be observed, moreover, that *Twaka, Taoca* is a well known name of one of the Mosquito tribes, and that the word also appears as the name of one of the rivers in their territory. The question therefore is one which requires further investigation before it can be regarded as settled.

With the first of the Chibchan tribes, we cross definitely the ethnographic boundary into South America. In treating the data from the southern continent, the material from the Pacific Coast languages will first be considered, followed by those of the Atlantic drainage.

The Chibchan stock is divided into an Isthmian and a con-

¹ Brinton: *Proc. Amer. Philos. Soc.*, XXXIV, p. 413.

tinental section by the Chocoan tribes who occupy the northwestern portion of Colombia. All of the Isthmian group (except possibly the Guaymi) form their words for tobacco from a stem *dua*, *tua*, viz., Guatuso, *tua*, *tuah*; Boruca, *dua*; Bribri, *deua*, *dawah*; Cabeçar, *duwa*; Terraba, Tirribi, *dua*, *dowo*; Dorasque, *dua*, *durni*. The Guaymi form is given as *so*, but this is probably the term for "to smoke," cf. Dorasque, *dua suluk*, "to smoke." Professor Wiener declares unhesitatingly that all these forms are derived from *tabacco* introduced by the Spanish and Negroes from Hispaniola. While such an origin is possible, yet in view of the existence of the neighboring forms like *wala* of the Cunan tribes, whose language is supposed to be a probable member of the Chibchan stock, the conclusion ought not to be jumped at that these *tua* forms are certainly from *tabacco*. The continental Chibchan languages present a complete divergence from the isthmian group and, moreover, do not agree among themselves. Thus we have Köggaba, *noai*; Chimila, *kööröka*; Paez, *mueihi*; Chibcha, *hoska*. If we accept the wider limits for the stock recently proposed by Rivet, we find for the Barbacoan, Cayapa, *tago*; Colorado, *taako* forms which more certainly look as if they were derived from *tabacco*. The coastal districts of Colombia and Ecuador might *a priori*, be regarded as the one area in the New World outside the northern and southern extremities, where tobacco would be least likely to have been in use in pre-Columbian times, so that a term of introduced origin might perhaps be expected here. The word found here preserves, as does the less certain Mosquitoan *twaka* and the Eskimo forms, the guttural sound present in the original, a fact certainly in favor of its origin from *tabacco*. Further evidence on this point will be referred to later, but as bearing on the whole question it may be noted that the Chocoan tribes who occupied the whole of the northern Pacific coast of Colombia, have a term for tobacco *ade* which seems quite unrelated to neighboring forms and is not open to the suspicion of an origin from *tabacco*, while the same thing is also true of the Esmeraldan stock on the southern Ecuadorian coast, who have the term *kanca*.

Whatever may be the ultimate decision as to the precise relation-

ship between Quechua and Aymara, these two languages of the old Inca state both employ the same word for tobacco, viz. *sairi*. There is considerable evidence of a wide dispersion of this term or rather of what may be its essential stem, in the area east of the Andes, but these instances of possible transmission can more conveniently be considered in treating of the languages of the Atlantic drainage. Professor Wiener, in seeking African origins for American tobacco names, derives the Quechua-Aymara *sairi* from the Negro *sira* meaning snuff,¹ basing his argument on Herrera's reference to "a load of shipwrecked Negroes" who in the early sixteenth century "had landed in Peru, where they formed a settlement with the Indians." It is quite evident, however, that Professor Wiener has again been in too much haste to prove his theory, and has failed apparently, even to consult a map to note where on the coast of "Peru" these Negroes came ashore! Had he done so, he would have found that the Cojimies river (as it is now called) where the refugees were said to have landed is in northern Ecuador, in Barbacoan, *i.e.*, Chibchan territory and quite out of contact with Quechua speech. His theory thus, turns out to be baseless, in so far as he is seeking a source for the term *sairi*. It may be noted, however, that the Cojimies river is approximately the southern boundary of the Barbacoan group of Chibchan languages, among which group the presence of a form *tago*, *taako* has already been noted. Possibly Herrera's Negro refugees are responsible thus for the introduction of the obviously tobacco-like term, having brought it with them from Hispaniola. This question remains, however, an amusing little puzzle.

The Araucanian term for tobacco presents a case of some little interest. The older forms of the word are given as *ptem*, *puthem*, *puthen*, while the modern form is given by Augusta² as *petrem*. Lenz³ and others have regarded the word as probably derived from the Guarani *pety*, and since Professor Wiener regards this latter as of Portuguese origin, he enthusiastically follows and adopts this

¹ *Op. cit.*, p. 186.

² F. J. de Augusta: *Gramatica Araucana*, Valdivia, 1903, p. 391.

³ R. Lenz: *Diccionario Etimologico de las voces chilenas derivadas de lenguas indigenas Americanas*. Santiago de Chile, 1904-10, p. 616.

view of the source of the Araucanian word.¹ Although it must be admitted that the similarity between the Araucanian and Guarani words is sufficiently striking to warrant the possibility of their relationship, yet there is not a little to be said on the other side. For it may be noted that there are in Araucanian several words beside that for tobacco which are formed from the same stem, (viz. *pt·en*, *puthen* to burn; *puthon* to perfume, fumigate, smoke; *puthocan* to make a smoke fire). Now while it would be possible for the word for tobacco to be derived from a stem from which come the ordinary words for "to burn," "to make a smoke fire," etc., it would be almost incredible that these latter words of wide and general meaning should have come into existence only, as Professor Wiener says, after the use of tobacco became known, particularly if this was a knowledge gained so late as the sixteenth century.

In speaking of this assumed late origin of the Araucanian term from the Portuguese through the Tupi-Guarani, Professor Wiener seeks to justify and account for its transmission by stating that "as Chile was a part of the Province of Rio de la Plata, the Guarani-Tupi word for "tobacco" and its derivatives naturally were transferred to the west." This statement is, apparently, quite unwarranted as Chile proper never was a portion either of the Viceroyalty of Rio de la Plata (which did not even come into existence until 1776 or nearly two centuries *after* Valdivia wrote his account of the Araucanian language); or of the earlier province which, organized in 1620, was separated from Chile proper by Tucuman and Cuyo. The theory of the late introduction of the Tupi-Guarani term through Spanish influences has obviously, little or nothing to be said in its favor, but this is not to deny that such transference might not have taken place long before the advent of Europeans; indeed the striking similarity of the words in the two languages would naturally lead to this inference. Yet in this connection, it must be observed that the two stocks were not in contact in historic times, being separated from each other by a wide extent of territory occupied by Calchaquian, Puelchean, Guycuruan and Charruan tribes. If transference had taken place

¹ Wiener: *op. cit.*, p. 185.

westward from the Guarani, one might expect to find traces of the fact in the words for tobacco used by these intervening tribes. Unfortunately we have data only from the Puelchean (?) and Guycuruan stocks. The word for tobacco among the former was *putroquin* of which the first portion would seem to be closely allied to the Araucanian especially if we consider the modern form *petrem*. The Guycuruan forms, *asareh*, *eserike*, etc., are obviously of quite different origin. The whole question is a rather involved one, and all that can be said with any certainty is, that any transmission which may have occurred was probably long anterior to the first appearance of Europeans in America.

The Tupi-Guarani is one of the most widely distributed stocks in South America and affords, with the Arawakan and Cariban languages, data of importance in the study of tobacco words. The Tupi-Guarani are divided into a number of more or less separate groups, from all of which except the Bolivian tribes we have material. The Guarani used a form which in phonetic rendering, would seem to have been approximately *petür*, while the Tupi of the Brazilian coast (who were probably offshoots of the Guarani that had migrated northward) employed a closely similar word, *petema*, *pyty'ma* (phonetically more nearly *pütüma*) *petun*. Of the Central Brazilian group the majority appear to have used closely related forms, viz. Apiaka, *petema*, *penteu*; Cayova, *pytyhla*; Yuruna, *poutima*, *pouilima*; Kamayura, *petun*, *petüm*; Aucto, *pä*, *päh*, *bē*. The Maues and Mundurucu however have apparently quite different forms, viz. *sovo* and *hě*, *ěě*. The upper Amazon group and the tribes of the Guiana borders, again show close similarity to the original Guarani type, viz., Cocamas, *pitema*; Omaguas, *petema*, *pitihla*; Oyampi, *petum*, *petoun*; Emerillon, *petime*. On the whole, the many tribes of this stock show a striking degree of uniformity over a great area, ranging from southern Brazil to the Guianas and from the eastern slopes of the Andes to the Atlantic coast at Cape S. Roque. Except for the already discussed case of the Araucanian resemblance, the Tupi-Guarani stem shows no similarity to other languages, and seems with one or two insignificant exceptions, to be confined to members of the stock alone.

This typically Tupi-Guarani stem, Professor Wiener declares¹ to be of modern origin, being derived he says from the Portuguese *betume* a word meaning "any pasty substance" but transferred according to his theory to tobacco. For this transfer or for the use of *betume* to mean tobacco, no evidence whatever is given; until it is given, one may be pardoned for regarding the theory as utterly baseless. Yet, even if clear evidence of the use of the word by the Portuguese with this meaning were brought forward, it would be incumbent on the proponent of the theory of its being the source of the Tupi-Guarani stem, to show how this borrowed stem could have obtained the distribution which it has. That in its spread it should be so strictly selective as to be adopted only by Tupi-Guarani tribes, and should reach far distant and isolated tribes without appearing among their neighbors, is very hard to believe, and very clear proof for such a theory would be necessary for its acceptance. Until then, some valid evidence is presented in its favor, the suggestion that the Tupi-Guarani words for tobacco were all derived from the Portuguese *betume* must be considered as quite unproved.

The Cariban stock vies with the Tupi-Guarani in its wide distribution, and like the latter, is spread over one large, continuous area and numerous smaller, isolated ones. Among the tribes occupying the large, continuous area, (covering a large part of Venezuela, the Guianas and northern Brazil) the word for tobacco appears in two forms, viz.: Cumanagota, *tam*, *tamo*; Cariniaco, *tamoui*; Carib, *tamoh*; Galibi, *tamoui*; Roucouyenne, *tamoui*; Apalai, *tamoui*; Akawai, *tamui*; Pianacoto, *tamoui*; Arara, *tamoui*; and Tamanaca, *kauwai*; Arecuna, *kauwai*; Macusi, *kawai*; Maquiritari, *kauai*; Paravilhana, *kauwai*; Azumara, *kawi*; Purigoto, *kawaii*. The tribes belonging to this second group, form a solid mass in southern Venezuela and on the upper Rio Branco, and are more or less surrounded on the north and east by the first group. Turning to the more isolated Cariban languages, we find the Apiaka of the lower Tocantins using the form *tame*, *tawe*; of the Parnahyba tribes, the Palmella have a similar form *tama* although the Pimen-

¹ *Op. cit.*, p. 135.

teira word *tciaming* may be of different origin. Of the upper Shingu tribes, the Bakairi use the form *tawe*, *tawi* while the Nahuqua have *teninya*. The eastern Colombian tribes used a form close to the general stem, viz., Carijona, *tamouinto*; Hianakoto-Umaua, *tame*; as did also the Carib tribes of the Lesser Antilles, *i-taman-le*.

There would appear to be little doubt but that all of these forms, with the exception of the Pimenteiro and Nahuqua, are derived from the same stem *tama* or *tawe* of which the latter, if Bakairi is established as the most archaic dialect, would be the original form. The affiliation of the *kauwai* forms with this presents some little difficulty since a shift of initial *t* to *k* seems hardly yet established in the Cariban languages.

Outside the Cariban stock, forms comparable to either the *tama* or *kauwai* stems seem not to occur, so that as in the case of the Tupi-Guarani their distribution is confined to the tribes belonging to the stock. Thus the same argument applies here, as in the Tupi-Guarani, namely that, in spite of an obvious similarity with the Negro *taba*, *tama*, *tawa* stems from which Professor Wiener would derive them,¹ the facts of distribution make such an origin well nigh impossible.

The tobacco words in use by the various Arawakan² tribes offer perhaps the most interesting and puzzling problems of any. Of very wide distribution, the main body of the stock extends in an irregular but practically continuous band from northern Bolivia to the Orinoco, while other isolated groups were found from the upper Paraguay to the west coast of Florida.

The majority of the tribes in the main Arawakan area use words for tobacco derived from one of two stems. The first stem is found in a compact, continuous area in the region of the upper Orinoco and Rio Negro in eastern Colombia and southern Venezuela, viz., Siusi, (*n*)*dzema*; Katapolitana, *dzema*; Karutana, *ndzema*; Caruzana, *zhema*; Cavere, (*scema*); Uarekina, *däma*; Guipunavi *dema*; Mandahuaca, *dehena*; Yavitero, *shama*, *dyäma*; Baniva,

¹ *Op. cit.*, p. 140.

² I am indebted to Dr. W. C. Farabee for information on variants from some Arawak as well as other S. American tribes.

djema; Piapoco, *tsema*; Maipure, *hema*; Tariana, *yäma*. To this group are probably related the forms in use by the Arawakan tribes of the interior of British Guiana, viz.: Wapisiana, *suma*; Atarois, *suma*, (*schama*); Taruma, *tuma*. The other stem, in contrast to the one just considered, is only found widely scattered, viz.: Yaulapiti (in the Upper Schingu region) *airi*; Pammari (on the Upper Purus) *hädyiri* (Cf. *odyi*, smoke); Piro (on the Ucayali) *iri*; Baniva (upper tributaries of the Rio Negro) *eri*, *äli*; Baré (ditto) *hari*, *ari*, *ali*; Goajiro (in the Goajiro Peninsula, Northern Colombia) *yüri*, *yüllü*; Arawak (Guiana coast) *yaari*, *yeury*, *yulli*; Arawak (Lesser Antilles) (*ioulli*).

Unlike the first stem, which seems to have no close analogues, these forms at once raise the question of possible extensive borrowing and transmission. It may be noted first, that the Arawakan tribe of the Anti or Campa (who were in the Apurimac and Urubamba valleys north of Cuzco, and close neighbors of the Piros as well as the Quechuas) used for tobacco a form given variously as *sairi*, *seri*, *tzeri*, *leri* of which all but the last are very evidently the regular Quechua word. The neighboring Piros had, as already noted, the form *iri*, and five small, supposedly independent stocks located in this same vicinity or near Arawakan tribes using this stem, had words for tobacco which show a rather striking similarity, viz., Chapacuran, *aiwi*, *ivi*, *eve*; Ypurinan, *awiri*; Salivan, *arre*; Uitotoan, *yera*; and (?) Chavantean *waari*, *wali*, *wani*. Too little has as yet been done in the way of comparative Arawakan studies to enable one to do more than suggest that there seems to be a possibility here, of the transmission of a single stem to unrelated tribes over very extensive areas, although further analysis may show the resemblances to be in large part misleading.

The Moxos form *sabare* (*sahua*) may (?) be allied to the *sema*, *suma* series; the adjacent Baures employ a different word *sini*, which seems to find analogies in the Yammamadi *sina*. The Paressi *azie* and Saraveka *atce* stand more by themselves, as does the word in the other Matto Grosso languages of the stock in this vicinity, viz., Mehinaku, Kustenau, Waura, *höka*. The Guaná form *tcahi* is almost identical with the neighboring Otuquian form *tcaha*.

The Arawakan languages are believed by Professor Wiener¹ to have borrowed their words for tobacco from the Malinke *dyamba* meaning tobacco, and the Mandingo *duli* meaning smoke; from the former he derives the *dzema*, *sema*, *yema* series, from the latter the *eri*, *yeury*, *iouli* series. The resemblances are, it must be said, not very striking, and it requires only slight further consideration to reveal serious difficulties. In the case of the *dzema*, *sema*, *yema* series although the fact of the limitation of the supposedly introduced form to tribes of the Arawakan stock is not, because of the smaller area and more compact character of the territory in which the stem occurs, as insuperable an obstacle as in several previous instances, it is nevertheless a serious difficulty. For it is not easy to see why or how the Negro *dyamba*, for whose existence in the Antilles no evidence is given, could have spread thence or been carried by "the Negroes and Indians of Hispaniola" to the tribes of the upper Orinoco and Rio Negro, over the heads of the whole series of coastal tribes, among whom, from the same source and by the same means, a wholly different stem is supposed to have been simultaneously introduced.

Similar difficulties are met with in the case of the words derived, according to the African theory, from the Mandingo *duli*. Transmission of the stem *yuli* along the Caribbean coast from the Antilles to the Goajiro peninsula might indeed occur, but how account for the break of some six or seven hundred miles between the area of this coastal distribution and the Rio Negro region where the first of the interior tribes using the stem is found; and for the similar gaps of 500 to 1000 miles which lie between the other isolated areas in which it occurs? The assumption that these words are derived from a foreign stem introduced into the Antilles at the time of the discovery, and spreading thence for thousands of miles, in such a way as to occur only in small isolated and widely separated areas, is on its face impossible. The observed facts of distribution can only be explained on the basis of the shattering and wide dispersion of a group of Arawakan tribes having this stem in common, and who carried it with them to their final scat-

¹ *Op. cit.*, p. 154-5.

tered seats. And just such a disruption and subsequent wide migration of the Arawakan stock is generally admitted to have taken place as the result of the northern movement of the Carib peoples. In the course of these movements, other tribes *might* perhaps have borrowed the Arawak word, and thus its seeming presence in the Salivan, Ypurinan, Chapacuran, and Chavantean stocks be accounted for.

The real problem, however, is that of the Quechua-Aymara *sairi*. If the series, already pointed out, be arranged schematically with reference to geographical position, we get the following:

Quechua-Aimara-Anti

SAIRI

Goajiro *yüri* Arawak *yaari*, *yeury*

Salivan *arre*

Uitoto *yera* Pammari *hädyiri*

Piro *iri*—Ypurinan *awiri*

Chapacuran *aiwi*, *ivi*

Yaulapiti *airi*—Chavantean *waari*

Perhaps it is only a curious coincidence that the *sairi* form adjoins the *yuri*, *iri*, *airi* series, and the resemblance in sound may be purely fortuitous. Yet the similarity is striking enough for a hypothesis to be defensible to the effect that *sairi* was originally derived from the Arawakan stem. Should this connection be admitted, however, it would be further and conclusive evidence of the impossibility of the Arawakan stem being of foreign origin and introduced as a result of European contact in the early sixteenth century. For as the word *sairi* was recorded as early as 1586 in Peru,¹ and as Garcillasso de la Vega probably gained his knowledge of the term before he left Peru shortly after the middle of the sixteenth century, there can be little doubt but that the word was in use in the Quechua language at least as early as 1550. Since, however, there was no effective Spanish penetration of the interior of Venezuela much before 1530 it would have been quite impossible for the supposed African forms to have accomplished the journey of several thousands of miles across the forests of the upper Amazon,

¹ Holguin: *Vocabulario de la Lengua general de todo el Peru llamada Quechua*. Lima, 1586.

in the decade or two before the appearance of the word *sairi* in Peru.

The remainder of the South American stocks may best be considered in two groups, (1) those of the Brazilian highlands and (2) the broad belt of small stocks lying just east of the Andes and extending from the Chaco region almost to the Caribbean.

The dominant factor in the first group is the Ges or Tapuyan stock which occupied the larger part of the whole area and appears to represent the oldest stratum of the aboriginal population. The languages in use by the tribes composing this group are pretty widely variant, and this is reflected in their words for tobacco. Some resemblances, however, may be seen. Thus we have Botocudo, *hinkum*, *gninnang*, etc.; Masacara, *hina*, *hingza*; Camacan, *hiah*; Apinages, *karenio*, *kariniako*; Cayapo, *karingu*, *kalinu*, *arena*; Aponegicren, *boraho*; Caraho, *paro*; Coroado, *boke*; Puris, *poke*. The forms in use by the Botocudo group may be compared with the neighboring Chavantean (Cherontes) *kwanyeu*, *waniyeu*; the Aponegicren-Caraho with the Caririan *poiuh*, *paewi*. The Acro-amirim *wari* seems to fall in with the Chavante *waari* in the Arawakan series. That there is any relation between the Arawakan Bâures and Yammamadi *sini*, *sina* and the Masacara *hina* seems doubtful. The Tapuyan tribes were with few exceptions non-agricultural, nomadic tribes, and many were said not to have had tobacco when first known to Europeans. It is to be expected, therefore, that the terms for tobacco in use should show similarities to those of some of their more civilized neighbors.

The other stocks in this eastern Brazilian area appear to have had, for the most part, quite independent words for tobacco. Thus we find Trumai, *fi*; Goyatacan, *apcign*; Bororoan, *mäh*; Carayan, *kuti*; Guatoan, *(ma)bo*. The last, and what is said to have been the "old word" among the Caraya, *biuwa*, may be connected with the Caririan *poiuh*, *paewi*. This may have been brought in by the Cariri from the west, since we find Apolistan *poi* for cigar. In view of the almost complete encirclement in historic times of the whole area of the Brazilian Highlands by tribes of the Tupi-Guarani stock, it is striking that there seems to be no trace among the Highland tribes of any *petun* forms.

In considering the patchwork of small stocks east of the Andes, we may most conveniently begin in the south and work northward toward the Caribbean. The Guycuruan stock of the Chaco at once affords a puzzle. The words here for tobacco are: *Mocovi, asareh, eserike*; Toba, *asiedeh, ecierok*. The striking resemblance of the Mocovi at least to the Quechua-Aymara *sairi* is at once apparent, and raises the question whether the Guycuruan languages can be added to the long list of those which appear to have derived their tobacco words from some common source. The stock was, in historic times, separated from the Quechua-Aymara by the territory of the Calchaquian tribes, of whose language we unfortunately know practically nothing. The closeness in form of the Guycuruan words to the Quechua and its location so far beyond any known Arawakan influence, suggest that perhaps the Quechuan form is the real source for both the Guycuruan and some of the other non-Arawakan terms, and that the two series of derivatives have accidentally met.

The Yurucare, Mosatena, and Tacana although long in close contact with the Quechua-Aymara and showing a considerable number of loan words from these languages in their own speech, give little suggestion of borrowing so far as regards their words for tobacco. These are in order, *kore, kos*, and *umasa, umaxa*, and all appear to be independent except for a possible (?) connection of the latter form with the Panoan *rumue*. The Chapacuran languages situated somewhat farther eastward, have Chapacura, *eve, ivi*; Pawumwa, *aiwi*; Itenes, *yove*, which, as already pointed out, may be connected with the Arawakan *iri, airi, yuri* series. The large Panoan stock shows at least two words for tobacco, Conibo, *rumue (dromba?)*; Caripuna, *rumoe*; Sipibo, *cika, tcika*. The Conibo-Caripuna form suggests the Chibchan (Paez) *mue-hi*, while the Sipibo word may be connected with the Chibchan *hoska*. Although at present the Panoan tribes are not in contact with the Chibchan stock, they are supposed to have formerly occupied territory much farther north, where contact would not have been impossible.

The Jurian *jiya* (phonetically *hiya*?) shows no notable resem-

blance to any neighboring forms, and this is also the case with the Mainan *pinterlo*, although the other word given from this stock, *uhualek*, might suggest connection with the Zaparan *xwaneka*. The Uitotoan *yera*, *yära iera* would appear to belong, as previously stated, to the Arawakan *yuri*, *iri* series. Jivaran *tsalano*, *sango* and the wide-spread Betoyan form *meno* seem all to be independent. Some interest attaches to a small group of four supposedly independent stocks lying between the Rio Negro and the Orinoco. The words used for tobacco by them are as follows: Makuan, *hot*, *hE(b)*; Piaroan, *hate*, *hahetue*; Puinavian, *jeup*, *job* (phonetically *höp*, *hob*); Guahiban, *joo*, *ho*. With these possibly the Guaraunan forms *aha*, *aoha*, *akae* may also be compared. The similarity between these various tobacco words suggests that these stocks, now somewhat separated, may formerly have lived in close association, and have been scattered as a result of the Cariban invasion. The Otomacan *gui* (phonetically *wi*) seems to show no decided resemblance to other neighboring forms, which is also the case with the Yaruran *gambi*.

There remains to consider two special cases in which we know, or can be practically certain, that the introduction of tobacco dates from after the period of the discovery. The first is that of the Tsonekan or Tehuelche stock of Patagonia. Here the evidence, both historical and archaeological shows that tobacco was not in use prior to the period of Spanish contact. The word in use among these tribes is given variously as *hiatca* and *golkul*. Neither of these forms shows resemblance to the neighboring terms, the Guycuruan variant *outcete* and the Otuquian *tcaha* being too remote to be of any probable significance.

The second case is that of the Alaskan Eskimo. Here, as we know from the form of the pipe, the knowledge and use of tobacco was introduced from the Chukchi of northeastern Siberia, who in their turn got tobacco and its name from the Russians. The word in use among all the Western Eskimo tribes is practically identical, viz., Kopagmiut, *tawarak*; Nuwukmiut, *tauwak*; Kotzebue Sound, *tauwak*; Malemiut, *tabak*; Ugalakmiut, *tawaku* and is obviously a close imitation of the Chukchi *tawax* (*tawar*, *taak*). The

Eskimo of Labrador, on the other hand, who probably secured tobacco first from the eastern Algonkian tribes, use a quite different form, *tupiving*. In the case of the western Eskimo thus, where we know the word to have been introduced, we have a very close approximation to the form tobacco, and no evidence of any greatly mutilated or modified forms as in the cases claimed in other areas by Professor Wiener.

The foregoing rapid survey and comparison of the words for tobacco in the majority of American Indian languages seems to establish the following results. Speaking in general there are approximately as many distinct stems for the word "tobacco" as there are separate linguistic stocks, and as a rule each stock has its own characteristic stem or stems. In some cases the same stem appears to be in use by two or more different stocks, but this is on the whole a rare phenomenon. Only one case has been found in which a single stem seems to have a wide distribution among unrelated languages, that of *sairi*, for which, however, no extra-American source can be claimed. The situation is, in fact, just what would be expected if tobacco had been known and used by the American Indians for centuries or even thousands of years, and tobacco words seem to be quite on a par with other words relating to native plants and animals.

Where more than one stem is in use by a stock, it is probable that one form is really characteristic, while the other or others are borrowed from neighboring stocks by peripheral tribes; or the stems for "tobacco," "to smoke," or "pipe" are used alternately by different portions of the stock. Where similarities between the words for tobacco suggest borrowing, in almost every case the tribes concerned either now are or at one time may have been in contact.

The facts brought out tend very strongly to disprove, on purely linguistic grounds, the theory recently advanced by Professor Wiener, that tobacco and its use as well as many of the names for the plant, were of European and Negro introduction at the period of the discovery. The number and variety alone of the stems in use in the New World would negative such an hypothesis, in spite

of its author's nimbleness in deriving Indian forms now from one, now from another Negro word. The facts of the distribution of the supposed Negro forms, however, are such as to preclude the origin of the American forms from foreign stems, for the restriction of particular stems to particular stocks rather than their indiscriminate dissemination, and the existence of these typical stems in far distant and isolated tribes belonging to the stock, make any explanation, other than one based on expansion and migration of an originally united group of related tribes, practically impossible. Lastly, further evidence of the native origin of many of these tobacco words, is seen in the existence of other words in the language, formed from related stems, a condition which could hardly exist were the tobacco words of extraneous origin.

That similarities can be found between certain Negro languages and some in America is obvious. They may be found between any two languages in any part of the world. The Mande *tama*, *tawa*, *taba* unquestionably suggests the Micmac *tumawa* or the Cariban *tamo*; but in view of all the known facts it is as unjustifiable to declare these American words to be derived from the Mande, as it would be to claim that the Cherokee *tcahu* was the source of the Otuquian *tcahi*, *tcaha*; the Miwok *kasu* of the Mosatena *kos*; the Creek *hitci* of the Saravekan *hatce*; or that because the Maori of New Zealand call the sun *ra*, they must have borrowed the term from Egyptian!

As stated in the beginning, the fact that tobacco and its use was known in America, centuries before the earliest European contact is abundantly proved by archaeological data; that it was in use at the time of the discovery is shown by historical evidence. To have made the foregoing investigation of the words for tobacco, with a view to showing their native rather than foreign origin, has been consequently in part, a work of supererogation. It has, however, disclosed a number of interesting problems and suggested several unsuspected possibilities in the way of cultural influences. Our knowledge of the great majority of American Indian languages is as yet too incomplete to enable us to make trustworthy analyses of much of their vocabulary, and for many lan-

guages must always remain so. But with increasing knowledge it may sometime be possible to obtain by some such study as has here been tentatively made, real clues as to the sources and lines of transmission of many of the cultivated plants of the New World.

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